

WHAT IS CLAIMED IS:

1. An aerosol generating device, comprising:
a housing having a flow passage therein;
a heater arranged along the flow passage and operable to vaporize liquid passing through the flow passage;
a source of a liquid to be volatilized in fluid communication with an inlet of the flow passage; and
an aerosol confinement sleeve located at the outlet end of the flow passage, the aerosol confinement sleeve having an interior configuration which controls a droplet size distribution of an aerosol delivered by the aerosol generating device.
2. The aerosol generating device of Claim 1, wherein the flow passage extends in a linear or non-linear direction and is a capillary sized passage.
3. The aerosol generating device of Claim 1, wherein the flow passage is located in a monolithic or multilayer body of an electrically insulating material, and/or the flow passage has a uniform cross section along the length thereof.
4. The aerosol generating device of Claim 1, which is a hand-held inhaler including a mouthpiece, the flow passage is a capillary sized passage, and

the outlet of the flow passage directs volatilized liquid into the aerosol confinement sleeve such that an aerosol is delivered to an interior of the mouthpiece.

5. The aerosol generating device of Claim 1, further comprising a mouthpiece which includes a mouthpiece opening through which aerosol is delivered to a patient, the outlet end of the flow passage being separated from the mouthpiece opening by a predetermined distance.

6. The aerosol generating device of Claim 1, wherein the flow passage is located in a capillary tube, the device further comprising a body surrounding a portion of the capillary tube such that a space is defined between the capillary tube and the body.

7. The aerosol generating device of Claim 6, wherein the aerosol confinement sleeve is removably attached to the body.

8. The aerosol generating device of Claim 6, wherein the body is of a thermally insulating material.

9. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a length of from about 1/4 inch to about 4 inches.
10. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a largest transverse dimension of from about 1/4 inch to about 2 inches.
11. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a ratio of a largest transverse dimension to a length thereof of from about 1:1 to about 0.25:4.
12. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a length of from about 1/4 inch to about 4 inches, a largest transverse dimension of from about 1/4 inch to about 2 inches, and a ratio of the largest transverse dimension to the length thereof of from about 1:1 to about 0.25:4.
13. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve is partially disposed in an interior of a mouthpiece of a hand-held inhaler.

14. The aerosol generating device of Claim 1, wherein the liquid comprises a medicament.

15. The aerosol generating device of Claim 14, wherein the medicament is at least one substance selected from the group consisting of analgesics, anginal preparations, anti-allergics, antibiotics, antihistamines, antitussives, bronchodilators, diuretics, anticholinergics, hormones, and anti-inflammatory agents.

16. The aerosol generating device of Claim 13, wherein the interior of the mouthpiece has a volumetric capacity in a range of from about 5 cc to about 10 cc.

17. The aerosol generating device of Claim 1, further comprising a power supply arranged to supply electrical current to the heater, wherein the supplied electrical current resistively heats the heater and volatilizes liquid in the flow passage.

18. The aerosol generating device of Claim 17, further comprising a controller operably connected to the power supply to activate the heater.

19. A method for generating an aerosol, comprising:
supplying liquid to a flow passage having an outlet end;
heating the liquid so as to volatilize liquid in the flow passage;
directing the volatilized liquid out of the outlet end of the flow passage into
an aerosol confinement sleeve located at the outlet end of the flow passage; and
admixing the volatilized liquid with air to produce an aerosol.
20. The method of Claim 19, wherein the liquid comprises a medicament.
21. The method of Claim 19, further comprising using an aerosol
confinement sleeve having a length and/or a largest transverse dimension to achieve
a desired size of aerosol particles of the aerosol.
22. The method of Claim 19, wherein the flow passage is in a capillary
tube, the method further comprising placing a body of a thermally insulating
material in surrounding relationship to the capillary tube to control heat loss from
the capillary tube.
23. The method of Claim 19, wherein the aerosol confinement sleeve is
removably attached to an outlet end of the body.

24. The method of Claim 19, wherein the aerosol confinement sleeve has a length of from about 1/4 inch to about 4 inches.

25. The method of Claim 19, wherein the aerosol confinement sleeve has a largest transverse dimension of from about 1/4 inch to about 2 inches.

26. The method of Claim 19, wherein the aerosol confinement sleeve has a ratio of a largest transverse dimension to a length thereof of from about 1:1 to about 0.25:4.

27. The method of Claim 19, wherein the aerosol confinement sleeve has a length of from about 1/4 inch to about 4 inches, a largest transverse dimension of from about 1/4 inch to about 2 inches, and a ratio of the largest transverse dimension to the length thereof of from about 1:1 to about 0.25:4.

28. The method of Claim 20, wherein the medicament is at least one substance selected from the group consisting of analgesics, anginal preparations, anti-allergics, antibiotics, antihistamines, antitussives, bronchodilators, diuretics, anticholinergics, hormones, and anti-inflammatory agents.

29. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a length of from about 1/8 inch to about 2 inches.

30. The aerosol generating device of Claim 1, wherein the aerosol confinement sleeve has a largest transverse dimension of from about 1/8 inch to about 1/2 inch.

31. The aerosol generating device of Claim 1, further comprising a body surrounding a portion of the flow passage such that a space is defined between the capillary passage and the body, the aerosol confinement sleeve being attached to the body, the body having a first inner diameter and the aerosol confinement sleeve having a second inner diameter, wherein (i) the first inner diameter is approximately equal to the second inner diameter, or (ii) the first inner diameter is smaller than the second inner diameter.

32. The method of Claim 19, wherein the aerosol confinement sleeve has a length of from about 1/8 inch to about 2 inches.

33. The method of Claim 19, wherein the aerosol confinement sleeve has a largest transverse dimension of from about 1/8 inch to about 1/2 inch.

34. The method of Claim 19, wherein a body surrounds a portion of the flow passage such that a space is defined between the capillary passage and the body, the aerosol confinement sleeve being attached to the body, the body having a first inner diameter and the aerosol confinement sleeve having a second inner diameter, wherein (i) the first inner diameter is approximately equal to the second inner diameter, or (ii) the first inner diameter is smaller than the second inner diameter.

35. An aerosol generating device, comprising:
a flow passage;
a heater arranged along the flow passage and operable to vaporize liquid passing through the flow passage; and
an aerosol confinement sleeve located at an outlet end of the flow passage, the aerosol confinement sleeve having an interior configuration which controls a droplet size distribution of an aerosol delivered by the aerosol generating device.

36. The aerosol generating device of Claim 35, wherein the flow passage is capillary sized.

37. The aerosol generating device of Claim 35, wherein the aerosol confinement sleeve has a length of from about 1/8 inch to about 2 inches, and a largest transverse dimension of from about 1/8 inch to about 1/2 inch.

38. The aerosol generating device of Claim 35, further comprising a body surrounding a portion of the flow passage such that a space is defined between the flow passage and the body, the aerosol confinement sleeve being attached to the body, the body having a first inner diameter and the aerosol confinement sleeve having a second inner diameter, wherein (i) the first inner diameter is approximately equal to the second inner diameter, or (ii) the first inner diameter is smaller than the second inner diameter.

39. The aerosol generating device of Claim 35, further comprising a mouthpiece which includes a mouthpiece opening through which aerosol is delivered to a patient.

40. The aerosol generating device of Claim 35, further comprising a source of a liquid to be volatilized in fluid communication with an inlet of the flow passage.